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TITLE : EPOXY RESIN COMPOSITION AND SEMICONDUCTOR DEVICE USING THE SAME

ABSTRACT : PROBLEM TO BE SOLVED: To obtain an epoxy resin composition, whose storage stability in its storage is enhanced and whose hardening property and hardened-substance characteristic are enhanced by a method, wherein the epoxy resin composite contains a phenolic resin, rubber particles and an inorganic filler, and a core part which is composed of a hardening promotor contains a microcapsule, covered with a shell part composed of a thermoplastic resin.

SOLUTION: An epoxy resin composite is obtained by using an epoxy resin, a phenolic resin, a microcapsule containing a hardening accelerator, rubber particles and an inorganic filler, and it is formed normally as a powder or a tablet by tableting the powder. The microcapsule which contains the hardening promoter has a core/shell structure, in which a core part which is composed of a hardening promoter, is covered with a shell part composed of a thermoplastic resin. As the thermoplastic resin which forms the shell structure, e.g. polyurea, polyurethane, an amino resin, an acrylic resin or the like may be enumerated, but the polyurea is suitable when its stability during its storage and the destruction easiness of the shell part in the molding operation of a hardened substance are taken into consideration.

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